# STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION





Tambrands, Inc.	)	Departmental
Androscoggin County	) Find	ings of Fact and Order
Auburn, Maine	) <b>A</b> i	ir Emission License
A-44-71-S-A (SM)	)	Amendment #1

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes Annotated (M.R.S.A.), §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

#### I. REGISTRATION

#### A. Introduction

Tambrands, Inc., a Procter & Gamble Company (Tambrands) of Auburn, Maine has applied for a minor modification to its air emissions license, A-44-71-Q-R/A (SM), issued September 12, 2011. The modifications to the air license include the following:

- Tambrands has requested to reclassify its process line equipment as an "insignificant activity" per 06-096 CMR 115.
- Tambrands is proposing to retrofit three existing boilers (Boilers #3, #4, and #5) to combust natural gas at their facility. The ability to fire natural gas and #4 fuel oil will afford Tambrands increased energy flexibility.

#### B. Emission Equipment

Tambrands is authorized to operate the following equipment:

#### **Fuel Burning Equipment**

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % Sulfur	Date of Manufacture	Stack #
Boiler #1	6.3	42.0 gal/hr	#4 Fuel oil, 1.0%S	1967	1
Boiler #2	6.3	42.0 gal/hr	#4 Fuel oil, 1.0%S	1967	1

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Boiler #3	6.3	42.0 gal/hr	#4 Fuel oil, 1.0%S	1973	2
		6177 scf/hr	Natural Gas		
Boiler #4	6.3	42.0 gal/hr	#4 Fuel oil, 1.0%S	1973	2
		6177 scf/hr	Natural Gas		
Boiler #5	6.3	42.0 gal/hr	#4 Fuel oil, 1.0%S	1973	2
		6177 scf/hr	Natural Gas		

## **Electrical Generation Equipment**

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, % Sulfur	Stack #
Generator #2	6.1	44.5	#2 Fuel oil, 0.0015%S	4
Fire Pump #1	1.8	14.2	#2 Fuel oil, 0.0015%S	10
Fire Pump #2	1.8	14.2	#2 Fuel oil, 0.0015%S	11

# **Process Equipment \***

Emission Unit #	Type of Equipment	Maximum Raw Material Process Rate (name and rate)	Date of Installation	Control Device
79-84	Fiber Processing	1040 kg\hr	2002	2 stage air handling equip; dust filter & bag house
85 & 86	Fiber Processing	520 kg\hr	2004	2 stage air handling equip; dust filter & bag house
Pearl	Converting	677 kg\hr	2002-2006	2 stage air handling equip; dust filter & bag house
West Wing	Converting	194 kg\hr	2007-2008	2 stage air handling equip; dust filter & bag house

\* These units at Tambrands have been included in the air emissions license, however, air emissions from each of these lines are collected, controlled and vented internally with no external building venting and as such are exempt from inclusion in an air emission license per 06-096 CMR 115, Appendix B § A(58). Per this amendment, the process equipment listed above will be removed from the air emissions license and will be considered "insignificant activities". The reasons for this designation is explained in greater detail in Section II of this air emissions license amendment.

### C. Application Classification

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant

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Emission Levels" as defined in the Department's regulations. The emission increases are determined by subtracting the current licensed emissions preceding the modification from the maximum future licensed allowed emissions, as follows:

Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Sig. Emission Level
PM	2.9	2.9	0	100
PM <sub>10</sub>	2.9	2.9	0	100
$SO_2$	21.5	21.5	0	100
NO <sub>x</sub>	18.6	18.6	0	100
CO	3.1	4.1	+1.0	100
VOC	24.9	24.9	0	50
CO₂e	<100,000	<100,000	<100,000	100,000

This modification is determined to be a minor modification and has been processed as such.

#### II. BEST PRACTICAL TREATMENT (BPT)

#### A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

#### B. Facility Description

Tambrands is a manufacturer of feminine products, the production of which requires the use of adhesive and fragrance additives. Manufacturing/converting and packaging lines which convert raw materials (primarily cotton fibers) into feminine hygiene products for distribution and sale worldwide generate particulate dust which is collected, controlled and vented internally with no

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external building penetrations and as such are exempt from inclusion in an air emission license. See 06-096 CMR 115, Appendix B § A(58). To support this applicability determination, Tambrands maintains a comprehensive inventory of its process equipment and particulate controls along with general arrangement and process diagrams which are available to the Department for review upon request.

Tambrands, Inc. uses perfumes and glues in product and packaging assembly as well as inks to create the package code on the plastic wrapper and bulk packaging of its product, which may contain VOCs and HAPs. Due to the location, application techniques, and configuration of these raw materials in the manufacturing lines, capture and control of emissions is not feasible. Line air quality testing has been done to insure line areas are within OSHA guidelines for ink coding application. Facility wide VOC and HAP air emission records are maintained to ensure that Tambrands does not exceed a limit of 24 TPY of VOCs and 6 TPY of HAPs.

#### C. Amendment Description

The following summarizes the modifications to the existing license requested per this amendment:

#### 1. Reclassify process line equipment as "insignificant"

Tambrands has requested to reclassify its existing process line equipment as Tambrands is also planning to add a new line called the insignificant. Conestoga which will also be considered insignificant. The process line equipment requested for insignificance includes the facility's fiber processing and converting lines, this does not mean the facility processes which emit VOC and HAP emissions are considered "insignificant". The facility's fiber and converting process lines and pollution control systems have evolved considerably over the last fifteen years. Tambrands has modified its many processes and controls multiple times over the years and because of this, air licensing applicability has become more complicated. Accordingly, as part of the applicability review for the Conestoga expansion, the facility explored the many changes to the site over the past years, licensing history, and overall regulatory applicability. Most notably, in 2004 the filtration system was redesigned to vent internally and external venting of air emissions ceased, which fundamentally changed the regulatory applicability of process equipment. Provided below is a summary of the permitting history:

 On January 19, 1999 Tambrands filed an application to amend their Air Emission License A-44-74-C-R. This amendment allowed Tambrands

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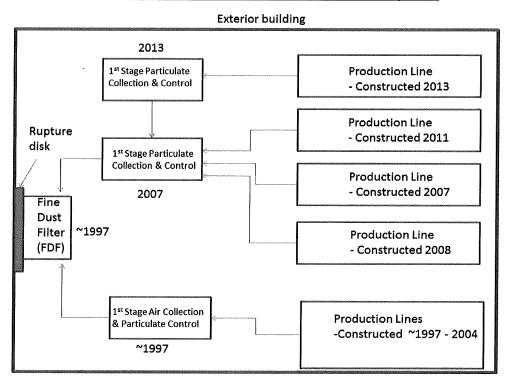
to install a new air handling, cooling, and filtration system for the Fiber Processing Department (Air System #1). The new air handling system consisted of a two stage rotary pre-filter and a drum filter designed to collect and recycle fiber, and three baghouse filters to control particulate matter (PM) with overall control efficiency of 98%. The new system was designed to exhaust both into the building and to the atmosphere.

- On October 20, 2000 Tambrands filed a minor revision application to allow four existing air systems (Air Systems #2, #3, #4, and #5) to discharge to the atmosphere. Previously, these air systems only discharged internally into the process building.
- On March 31, 2002 Tambrands filed another minor revision application to replace and remove Air Systems #2 and #3. The new air handling equipment (Air Systems #9 and #10) were comprised of a two stage rotary pre-filter and a rotary pleated belt filter with a combined PM capture efficiency of 98% followed by a baghouse with 98% capture efficiency. The new systems could also exhaust back into the process building or the atmosphere. PM emissions to the atmosphere from the two new air systems could not exceed 1.14 lbs/hour.
- On July 2, 2004 Tambrands filed an application for the installation of Lines #85 and #86, the correction of nomenclature errors regarding air handling equipment, and the removal of Air Systems #3 and #4. As part of this application, all remaining air filtration system units including baghouses were redesigned to recirculate internally only, with no emissions exhausted to the atmosphere.

Provided below is a diagram of the new production line and how it integrates with the existing process lines and air handling systems at Tambrands. As depicted in the diagram all air emissions generated on the process lines are ultimately captured in the Fine Dust Filter (FDF) which are filtered and returned to the process areas as clean breathable air with no external building exhaust points.

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#### **Schematic of Process Lines & Air Collection and Control Systems**



Because all emissions from converting and packaging lines are captured, filtered, and vented internally, without any external building penetrations, this processing equipment is exempt from Maine's 06-096 CMR 115 air licensing program. Provided below is a reference to the applicable exemption:

06-096 CMR 115, Appendix B § A(58)) - "Carving, cutting, routing, turning, drilling, machining, sawing, surface grinding, sanding, planing, buffing, shot blasting, shot peening, sintering or polishing; Ceramics, glass, leather, metals, plastics, rubber, concrete, paper stock or wood, also including cotton roll grinding and groundwood pulping stone sharpening provided that:

- a. Activity is performed indoors; and
- b. No fugitive particulate emissions enter the environment."

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The processing equipment (both existing and new) is exempt from licensing and therefore this equipment in the future is mentioned only for inventory purposes.

# 2. Boilers #3, #4, and #5 retrofitted to combust natural gas

Tambrands is proposing to retrofit three existing boilers, Boiler #3, Boiler #4, and Boiler #5. All three boilers are Cleaver Brooks package boilers with maximum heat input ratings of 6.3 MMBtu/hr and were manufactured in 1973. The package boilers will be retrofitted with 150 horse power (HP) duel fuel burners and upgraded with the Cleaver-Brook Hawk control system. The Hawk control system integrates the boiler/burner system, the heat recovery system, and the feed water system to provide maximum efficiency and fuel savings. The system incorporates parallel positioning which uses dedicated actuators for the fuel and air values to optimize the air-to-fuel ratio, resulting in lower excess air levels. The parallel positioning system will increase boiler efficiency, with energy savings of up to 5%. The Hawk control system with parallel positioning will provide optimum fuel savings and subsequent emissions reductions without significantly modifying the boiler by installing pre-combustion controls such as flue gas recirculation or a post-combustion add-on pollution control devise which would be infeasible for such relatively small boilers.

The three boilers will continue to exhaust through a common stack designated Stack #2. No increase in operational capability will result from this conversion and overall heat input capacity will not be affected. Tambrands is proposing to maintain its ability to fire No. 4 oil in addition to natural gas to maximize the facility's fuel flexibility.

Add-on pollution control was determined to not be feasible for units of this size, therefore, good combustion control is considered BACT. Emissions can be limited by good combustion practices including ensuring complete and efficient combustion of fuel. This includes controlling combustion temperatures, proper maintenance including keeping the air/fuel ratio at the boiler manufacturer's specified settings, and maintaining the atomizing air pressure at the correct levels. Good combustion practices are a proven technically feasible way of controlling emissions from boilers. Good combustion control is maintained by meeting requirements for tune-ups as required in 40 CFR 63 Subpart JJJJJJ.

## 1. BACT/BPT Findings

The BACT emission limits for the boiler were based on the following:

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## Natural Gas

PM/PM<sub>10</sub> - 0.05 lb/MMBtu based on 06-096 CMR 115, BACT SO<sub>2</sub> - 0.6 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98 NO<sub>x</sub> - 100 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98 CO - 84 lb/MMscf based on AP-42, Table 1.4-1, dated 7/98 VOC - 5.5 lb/MMscf based on AP-42, Table 1.4-2, dated 7/98 Opacity - 06-096 CMR 101 or previous BACT

The BACT emission limits for each boiler when firing natural gas is the following:

Unit	PM (lb/hr)	4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			The section and the contract of the state of	VOC
Boiler #3, #4, #5	0.4	0.4	0.1	0.7	0.6	0.1
(each rated at 6.3 MMBtu/hr)						

When firing natural gas, visible emissions from the common stack (Stack #2) shall not exceed 10% opacity on a 6 minute block average, except for no more than one (1) six (6) minute block average in a 3 hour period.

The following table shows how the facility-wide MMBtu/yr limit when firing natural gas was determined based on the current license fuel limit for #4 fuel oil.

Current Limit:	300,000	gal/yr of No. 4 fuel oil
Heat Content of No. 4:	145	MMBtu/1000 gal
Heat Content of natural gas	1020	MMBtu/MMscf
Proposed Limit:	43,500	MMBtu/year
Equivalent Limit:	42.65	MMscf/yr Natural Gas
Heat Input of Boilers:	6.3	MMBtu/hr
No. 4 fuel oil Firing Rate:	42	gal/hr
Natural Gas Firing Rate:	6176.5	scf/hr

Tambrands shall be limited to 43,500 MMBtu/year calculated by using the above emission factors and based on the firing of either natural gas or #4 fuel oil in the boilers.

When firing #4 fuel oil the following applies:

Per 38 MRSA §603-A(2)(A)(1) and (2), beginning January 1, 2018, or on the date specified in the statute, the facility shall fire #4 fuel oil with a maximum sulfur content limit of 0.5% by weight. The specific dates contained in this

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paragraph reflect the current dates in the statute as of the effective date of this license; however, if the statute is revised, the facility shall comply with the revised dates upon promulgation of the statute revision.

# 2. Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use both on a monthly and 12 month rolling total basis which will be used to demonstrate compliance with the facility-wide 43,500 MMBtu/yr limit. Documentation shall include the type of fuel used and sulfur content of the #4 fuel oil, when used.

# D. 40 CFR Part 60, Subpart Dc (NSPS)

Due to the size of the boilers, they are not subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

## E. 40 CFR Part 63 Subpart JJJJJJ (NESHAP)

40 CFR Part 63 Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers Area Sources (NESHAP Area Source Standard) applies to new and reconstructed boilers. Under this standard, reconstruction is defined as:

- "...as the replacement of components of an existing facility to such an extent that:
  - (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
  - (2) It is technologically and economically feasible to meet the applicable standards set forth Part 60/Part 63. 40 C.F.R. Part 60 further defines 'fixed capital cost' as the capital needed to provide all the depreciable components." See 40 C.F.R. § 63.2.

Based on the preliminary estimate and engineering conducted by a third party, the total cost for the project is estimated at a maximum of \$60,000 per boiler including updated controls. This low total project cost as compared to the significantly higher cost of three entirely new boilers assures that the modifications will not exceed the 50% threshold. Accordingly, these retrofits do not satisfy the definition of reconstruction and do not trigger new more restrictive NESHAP standards for new or reconstructed Boilers.

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The current air emissions license, A-44-71-Q-R/A, includes a summary (provided for informational purposes) of the requirements of 40 CFR Part 63 Subpart JJJJJJ for Boilers #1, #2, #3, #4, and #5, which are considered existing oil boilers rated less than 10 MMBtu/hr. Gas-fired boilers are exempt from 40 CFR Part 63, Subpart JJJJJJ. However, boilers which fire fuel oil are not. A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [40 CFR Part 63.11237]

#### F. Emergency Generators

Tambrands has at its facility an emergency generator (designated Generator #2) and two emergency fire-pump diesel units (designated Fire Pump #1 and Fire Pump #2). Generator #2 has a maximum design heat input capacity of 6.1 MMBtu/hr and was manufactured in 1990. Fire Pumps #1 and #2 have maximum design heat input capacities of 1.8 MMBtu/hr each, and were manufactured in 2000 and 2001 respectively. None of these emergency engines are subject to NSPS requirements for IC engines found at 40 CFR 60 Subpart IIII.

There was an error made in the Order section of Air Emissions License, A-44-71-Q-R/A, issued September 12, 2011. Specifically the fuel sulfur content was limited to 0.05%, however, these engines should be limited to 0.0015% sulfur content by weight. This amendment will correct this error. Also, the Department has updated its policy concerning emergency engines to reflect the requirements in the recently adopted federal rules. Therefore, the state requirement which limited emergency engines to 500 hours per year (which included emergency use time) is now limited 100 hours per year of which now excludes emergency use time. This change is more in line with the recent federal regulation pertaining to emergency engines.

#### G. Annual Facility Emissions

Tambrands shall be restricted to the following annual emissions, based on a 12 month rolling total (emissions based on worst case with firing only #4 fuel oil):

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# Total Licensed Annual Emissions for the Facility Tons/year

(used to calculate the annual license fee)

Pollutant		s/year			
	<b>Boiler Units</b>	nits   Emerg Gens   Process Emissions			
PM	2.5	0.4	n/a	2.9	
$PM_{10}$	2.5	0.4	n/a	2.9	
$SO_2$	21.2	0.3	n/a	21.5	
$\frac{SO_2}{NO_x}$	8.4	10.2	n/a	18.6	
$\frac{10x}{CO}$	1.8	2.3	n/a	4.1	
VOC	0.1	0.8	24	24.9	
HAPs	n/a	n/a	6.0	6.0	

# III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
$PM_{10}$	25
$SO_2$	50
NO <sub>x</sub>	50
CO	250

The total facility licensed emissions are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

#### **ORDER**

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,

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will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-44-71-S-A subject to the following conditions.

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

#### **SPECIFIC CONDITIONS**

The following replaces Condition (16) of Air Emissions License, A-44-71-Q-R/A:

#### (16) Boiler Units

- A. Total fuel use, for Boilers #1, #2, #3, #4 and #5 combined, shall not exceed 300,000 gals/year of #4 fuel oil with a maximum sulfur content of 1.0% sulfur by weight, based on a 12-month rolling total. Boilers #3, #4, and #5 are licensed to fire natural gas. The annual heat input to all boilers combined shall be limited to 43,500 MMBtu/year based on the firing of either natural gas or #4 fuel oil in the boilers. [06-096 CMR 115, BPT]
- B. Compliance with the fuel restriction shall be based on fuel records of both #4 fuel oil and natural gas, which shall include receipts from the supplier showing the quantity of fuel delivered and, (for #4 fuel oil) supplier certification indicating the percent sulfur of the purchased fuel. Fuel use records shall be maintained on a monthly basis, in addition to the twelve-month rolling total. [06-096 CMR 115, BPT]

Per 38 MRSA §603-A(2)(A)(1) and (2), beginning January 1, 2018 or on the date specified in the statute, Tambrands shall fire #4 fuel oil with a maximum sulfur content limit of 0.5% by weight. The specific dates contained in this paragraph reflect the current dates in the statute as of the effective date of this license; however, if the statute is revised, the facility shall comply with the revised dates upon promulgation of the statute revision. [38 MRSA §603-A(2)(A)(1) and (2)]

C. Emissions from Boilers #1, #2, #3, #4 and #5 when firing #4 fuel oil shall not exceed the following:

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Equipment		PM*	PM <sub>10*</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
	lb/MMBtu	0.12	_	-	-	-	-
Boiler #1	lb/hr	0.8	0.8	6.4	2.5	0.8	0.1
	lb/MMBtu	0.12	_	-	-	-	-
Boiler #2	lb/hr	0.8	0.8	6.4	2.5	0.8	0.1
	lb/MMBtu	0.12	-	-	-	-	-
Boiler #3	lb/hr	0.8	0.8	6.4	2.5	0.8	0.1
	lb/MMBtu	0.12	_	-	-	_	-
Boiler #4	lb/hr	0.8	0.8	6.4	2.5	0.8	0.1
	lb/MMBtu	0.12	-	-	-	-	-
Boiler #5	lb/hr	0.8	0.8	6.4	2.5	0.8	0.1

<sup>\*</sup> These limits are based on Filterable PM/PM10 only

Emission limits for each boiler when firing natural gas is the following:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	10 Table 2		CO (lb/hr)	VOC (lb/hr)
Boiler #3, #4, #5	0.4	0.4	0.1	0.7	0.6	0.1

[06-096 CMR 115, BPT/BACT & 06-096 CMR 103]

#### D. Visible emissions:

- 1. Visible emissions from stack #1, during periods when only one of the two boilers (Boilers #1 and #2) is in operation shall not exceed 20% opacity on a 6-minute block average, except for no more than one 6-minute block average in a 3-hour period. [06-096 CMR 101]
- 2. Visible emissions from stack #1, during periods when both of the two boilers (Boilers #1 and #2) are in operation shall not exceed 30% opacity on a 6-minute block average, except for no more than three 6-minute block averages in a 3-hour period. [06-096 CMR 101]
- 3. Visible emissions from stack #2, during periods when only one of the three boilers (Boilers #3, #4 and #5) is in operation shall not exceed 20% opacity on a 6-minute block average, except for no more than one 6-minute block average in a 3-hour period. [06-096 CMR 101]
- 4. Visible emissions from stack #2, during periods when more than one of the three boilers (Boilers #3, #4 and #5) is in operation shall not exceed

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30% opacity on a 6-minute block average, except for no more than three 6-minute block averages in a 3-hour period. [06-096 CMR 101]

5. When firing natural gas, visible emissions from the common stack (Stack #2) shall not exceed 10% opacity on a 6 minute block average, except for no more than one (1) six (6) minute block average in a 3 hour period.

#### E. 40 CFR Part 63 Subpart JJJJJJ requirements:

Tambrands is subject to the following federal requirements for Boilers #1 and #2. Boilers #3, #4, and #5 (dual fuel gas-fired boilers) may be exempt from 40 CFR Part 63, Subpart JJJJJJ. A "gas-fired boiler" is defined as any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. [40 CFR Part 63.11237]

Notification forms and additional rule information can be found on the following website: <a href="http://www.epa.gov/ttn/atw/boiler/boilerpg.html">http://www.epa.gov/ttn/atw/boiler/boilerpg.html</a>.

- a. Compliance Dates, Notifications, and Work Practice Requirements
  - i. Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014. [40 CFR Part 63.11225(a)(2)]

#### ii. Boiler Tune-Up Program

- (a) A boiler tune-up program shall be implemented to include the initial tune-up of applicable boilers no later than March 21, 2014. [40 CFR Part 63.11196(a)(1)]
- (b) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
  - 1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers

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with oxygen trim system, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(1)]

- 2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
- 3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim system, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(3)]
- 4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
- 5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 CFR Part 63.11223(b)(5)]
- 6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up.

  [40 CFR Part 63.11223(b)(7)]
- (c) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]
- (d) The facility shall implement a boiler tune-up program after the initial tune-up and initial compliance report (called a Notification of Compliance Status) has been submitted.
  - 1. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler.

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#### See chart below:

Boiler Category	Tune-Up Frequency
New or Existing Oil, Biomass and Coal fired	
boilers that are not designated as "Boilers with	
less frequent tune up requirements" listed below	Every 2 years
New and Existing Oil, Biomass, and Coal fired	
Boilers with less frequent tune up requirements	
Seasonal (see definition §63.11237)	Every 5 years
Limited use (see definition §63.11237)	Every 5 years
With a heat input capacity of <5MMBtu/hr	Every 5 years
Boiler with oxygen trim system which maintains	
an optimum air-to-fuel ratio that would	
otherwise be subject to a biennial tune up	Every 5 years

[40 CFR Part 63.11223(a) and Table 2]

2. The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured at high fire or typical operating load, before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the types and amounts of fuels used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)] The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

#### b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63 Subpart JJJJJJ including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize

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emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

Note: EPA will require submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. However, the system will not be in place until October 2013, so sources may submit the written NOCS to the EPA Administrator. [63.1125(a)(4)(vi)]

The following replaces Condition (17) A, C, and H of Air Emissions License, A-44-71-Q-R/A:

- (17) Emergency Generators (Generator #2, Fire Pump #1, and Fire Pump #2)
  - A. Generator #2 and Fire Pumps #1 and #2 each shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 CMR 115]
  - C. Tambrands shall fire diesel fuel with a sulfur content of no greater than 0.0015% sulfur by weight in Generator #2 and Fire Pumps #1 and #2. Compliance with the sulfur content restriction shall be demonstrated through purchase receipts or supplier certification indicating the sulfur content of the purchased fuel. [06-096 CMR 115, BPT]
  - H. The Emergency Generators (Generator #2, Fire Pump #1, and Fire Pump #2) shall meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:
    - 1. Tambrands shall meet the following operational limitations for each of the compression ignition emergency generator(s):
      - a. Change the oil and filter annually,
      - b. Inspect the air cleaner annually and replace as necessary, and
      - c. Inspect the hoses and belts annually and replace as necessary.

A log shall be maintained documenting compliance with the operational limitations.

[40 CFR §63.6603(a) and Table 2(d); and 06-096 CMR 115]

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## 2. Oil Analysis Program Option

Tambrands has the option of utilizing an oil analysis program which complies with the requirements of §63.6625(i) in order to extend the specified oil change requirement. If this option is used, Tambrands must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR§63.6625(i)]

#### 3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on each generator. [40 CFR §63.6625(f)]

#### 4. Maintenance, Testing, and Non-Emergency Operating Situations

- a. The generators shall each be limited to 100 hours/year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise to supply power as part of a financial arrangement with another entity unless the conditions in §63.6640(f)(4)(ii) are met). These limits are based on a calendar year. Compliance shall be demonstrated by a written log of all generator operating hours. [40 CFR §63.6640(f) and 06-096 CMR 115]
- b. Tambrands shall keep records that include maintenance conducted on the generators and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generators are operated during a period of demand response or deviation from standard voltage or frequency, or to supply power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the Tambrands shall keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [40 CFR §63.6655(e) and (f)]

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## 5. Operation and Maintenance

The generators shall be operated and maintained according to the manufacturer's emission-related written instructions or Tambrands shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]

6. Requirements For Demand Response Availability Over 15 Hours Per Year (and greater than 100 brake hp)

If Tambrands operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the facility shall submit an annual report containing the information in §63.6650(h)(1)(i) through (ix). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (<a href="www.epa.gov/cdx">www.epa.gov/cdx</a>). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

Director, Office of Ecosystem Protection U.S. Environmental Protection Agency 5 Post Office Square, Suite 100 Boston, MA 02109-3912

[40 CFR §63.6650(h)]

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Condition (18) A of Air Emissions Licand is removed from the air license Equipment as insignificant.			
DONE AND DATED IN AUGUSTA, MAI			y OF March 2014.
BY: Mare Allen Robert Com PATRICIA W. AHO, COMMISSIO	<u>l</u> NER ,	for	
The term of this amendment shall be of License A-44-71-Q-R/A	oncuri	ent with	the term of Air Emission
PLEASE NOTE ATTACHED SHEET FOR	k GUID	ANCE ON	APPEAL PROCEDURES
Date of initial receipt of application: <u>Janua</u> Date of application acceptance: <u>February</u>			
Date filed with the Board of Environmental	Protect	ion:	
This Order prepared by Edwin Cousins, Bureau of A	ir Quality	,	Filed MAR 7 2014

State of Maine Board of Environmental Protection